

CLAIMS

What is claimed is:

- 1 1. A method for opening a communications stream between a user terminal
2 and a base station in a communications system comprising:
3 ✓ registering the base station and the user terminal with each other by
4 exchanging identification information and configuration information; '
5 sending a request to open a communications stream message from the user
6 terminal to the base station;
7 receiving a channel assignment message from the base station in response
8 to the request message, the channel assignment message including an identification of an
9 assigned communications channel for the communications stream;
10 sending data from the user terminal and receiving data from the base
11 station over the assigned communications channel.
- 1 2. The method of Claim 1, further comprising receiving data to transmit at a
2 buffer in the user terminal and wherein sending a request is performed in response to data
3 having been received in the buffer.
- 1 3. The method of Claim 1, wherein the request comprises an identification of
2 the registration information.
- 1 4. The method of Claim 1, wherein the request comprises an extended
2 training sequence to assist the base station in measuring spatial parameters.
- 1 5. The method of Claim 1, wherein sending the request message comprises
2 sending the request message on a random access channel that is shared with other user
3 terminals.

1 12. A machine-readable medium having stored thereon data representing
2 sequences of instructions which, when executed by a machine, cause the machine to
3 perform operations comprising:
4 registering a base station and a user terminal of a communications system
5 with each other by exchanging identification information and configuration information;
6 sending a request to open a communications stream message from the user
7 terminal to the base station;
8 receiving a channel assignment message from the base station in response
9 to the request message, the channel assignment message including an identification of an
10 assigned communications channel for the communications stream;
11 sending data from the user terminal and receiving data from the base
12 station over the assigned communications channel.

1 13. The medium of Claim 12, further comprising instructions which, when
2 executed by the machine, cause the machine to perform further operations comprising
3 receiving data to transmit at a buffer in the user terminal and wherein the instructions for
4 sending a request are performed in response to data having been received in the buffer.

1 14. The medium of Claim 12, wherein the request comprises an identification
2 of the registration information.

1 15. The medium of Claim 12, wherein the instructions for sending the request
2 message further comprise instructions which, when executed by the machine, cause the
3 machine to perform further operations comprising sending the request message on a
4 random access channel is assigned to the user terminal during registering and that is
5 shared with other user terminals.

1 16. The medium of Claim 12, wherein the request message includes
2 information about the transmission power of the request message and wherein the
3 channel assignment message includes information about adjusting the transmission power
4 of the remote for use on the assigned communications channel.

1 17. A method for opening a communications stream between a user terminal
2 and a base station in a communications system comprising:
3 registering the base station and the user terminal with each other by
4 exchanging identification information and configuration information;
5 receiving a request to open a communications stream message at the base
6 station from the user terminal;
7 sending a channel assignment message from the base station in response to
8 the request message, the channel assignment message including an identification of an
9 assigned communications channel for the communications stream;
10 receiving data from the user terminal and sending data from the base
11 station over the assigned communications channel.

1 18. The method of Claim 17, wherein the request comprises an identification
2 of the registration information.

1 19. The method of Claim 17, wherein the request comprises an extended
2 training sequence to assist the base station in measuring spatial parameters.

1 20. The method of Claim 17, wherein receiving the request message
2 comprises receiving the request message on a random access channel that is assigned to
3 the user terminal during registering and that is shared with other user terminals.

1 21. The method of Claim 17, wherein the configuration information includes
2 information regarding the capabilities and communications environment of the user
3 terminal.

1 22. The method of Claim 17, further comprising sending a page from the base
2 station and wherein receiving a request comprises receiving a request in response to the
3 sent page.

1 23. The method of Claim 17, further comprising receiving data to transmit at a
2 buffer in the base station and wherein sending a page is performed in response to data
3 having been received in the buffer.

1 24. A machine-readable medium having stored thereon data representing
2 sequences of instructions which, when executed by a machine, cause the machine to
3 perform operations comprising:

4 registering a base station and a user terminal of a communications system
5 with each other by exchanging identification information and configuration information;

6 receiving a request to open a communications stream message at the base
7 station from the user terminal;

8 sending a channel assignment message from the base station in response to
9 the request message, the channel assignment message including an identification of an
10 assigned communications channel for the communications stream;

11 receiving data from the user terminal and sending data from the base
12 station over the assigned communications channel.

1 25. The medium of Claim 24, wherein the request comprises an identification
2 of the registration information.

1 26. The medium of Claim 24, wherein the request comprises an extended
2 training sequence to assist the base station in measuring spatial parameters.

1 27. The medium of Claim 24, wherein the instructions for receiving the
2 request message further comprise instructions which, when executed by the machine,
3 cause the machine to perform further operations comprising receiving the request
4 message on a random access channel that is assigned to the user terminal during
5 registering and that is shared with other user terminals.

1 28. The medium of Claim 24, wherein , the configuration information includes
2 information regarding the capabilities and communications environment of the user
3 terminal.

1 29. The medium of Claim 24, further comprising instructions which, when
2 executed by the machine, cause the machine to perform further operations comprising
3 sending a page from the base station and wherein the instructions for receiving a request
4 further comprise instructions which, when executed by the machine, cause the machine to
5 perform further operations comprising receiving a request in response to the sent page.